



**Rail Enhancement Fund
Project Application Form**

Internal Use

DRPT Tracking #

Date: 1-31-2008

A. Name of Applicant (Name and Address)

Virginia Railway Express (VRE)
1500 King Street
Suite 202
Alexandria, VA 22314

Applicant type:

☒ Passenger Railroad

☐ Freight Railroad

☐ Locality

☐ Business

☐ Other _____

B. Contact Information:

Responsible Person/Title: Dale Zehner, Chief Executive Officer

Telephone: (703) 838-5411

Fax: (703) 684-1313

Email: dzehner@vre.org

Project Manager/Title: Mr. Eric Johnson, P.E.

Telephone: (703) 684-1001

Fax: (703) 684-1313

Email: ejohnson@vre.org

C. Project Title:

Automatic train control system, Arlington, VA to Washington, DC

D. Project Location: (City/County, Rail line, Railroad Mile Post, attach map)

CSX Transportation Inc. (CSXT) RF&P Subdivision between Milepost CFP 110 in Arlington, VA and Milepost CFP 112.3 in Washington, DC. See attached project location map.

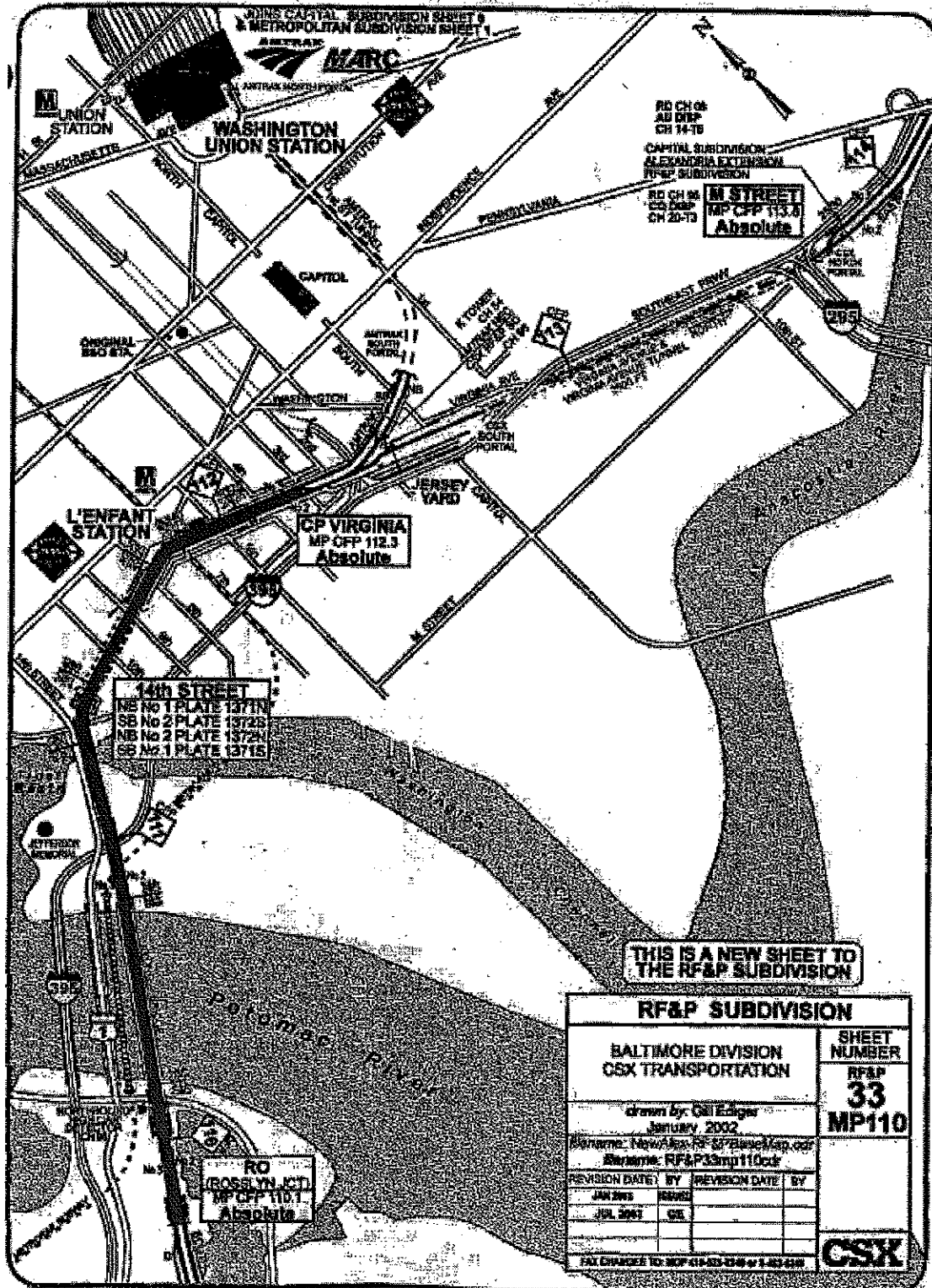
E. Owner of Property/Right-of-Way/Facility/Personal Property:

CSXT

F. Responsible Party for Continuous Maintenance of Project:

CSXT

Project Location Automatic Train Control System, Arlington, VA to Washington, DC



G. Project Information:

1) Description of Project:

The project provides for the design and installation of an Automatic Train Control system with locomotive cab signals on the CSXT RF&P Subdivision between Milepost CFP 110 in Arlington, VA and Milepost CFP 112.3 in Washington, DC.

2) Project Objective:

The objective of this project is to improve the efficiency of VRE operations (and other passenger or freight rail operations) and fill in a gap in the automatic train control system on the CSXT RF&P Subdivision between Richmond, VA and Washington, DC. An automatic train control system with cab signals currently exists between Richmond, VA and Arlington, VA. The approximately 2 mile segment of track utilized by the VRE from Arlington to the Virginia Avenue Tower (Milepost CFP 112.3) in Washington, DC is controlled by a Centralized Traffic Control (CTC) system, absent cab signals. The proposed project will fill in that gap and allow train traffic to operate at greater speeds and closer spacing than is currently possible.

3) Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

The VRE is committed to offering high-quality commuter rail service to its existing customers and within its existing service area. VRE's top priorities, therefore, are improving the reliability of service and expanding the capacity of its existing trains in response to current conditions and future increases in demand for service.

The VRE is a partner, with the Commonwealth of Virginia/DRPT and CSXT, in a memorandum of understanding (MOU) committing to a series of improvements to expand rail capacity in the CSXT corridor between Fredericksburg, VA and Washington, DC and a corresponding expansion of VRE service following such improvements. The primary focus of the improvements is the construction of a third mainline track between Fredericksburg and Washington, DC.

The proposed automatic train control/cab signal system will complement those enhancements and further improve service quality and efficiency between Fredericksburg and Washington, DC.

4) Describe the Public Benefit of Project. Identify significant types of benefits and beneficiaries from this project. (See Attachment A)

Since service began in 1992, the VRE has been very successful in accomplishing its primary mission – to provide safe, reliable, cost-effective, and customer-responsive rail passenger service as an integral part of a balanced, intermodal regional transportation system. The VRE serves commuters throughout northern and central Virginia, including approximately 4,690 government and military workers, and carries the equivalent of one lane of peak traffic from the I-95 and I-66 corridors each day. As an energy efficient mode, the VRE helps to reduce regional air emissions and congestion. It is also a critical element of the region's transportation infrastructure for evacuation of the District of Columbia in the event of an emergency.

VRE service has expanded from an initial 16 trains a day to 30 trains a day while ridership has risen beyond the original vision of 10,000 trips per day to approximately 14,700 trips per day as of October 2007. However, on-time performance and reliability has been adversely affected by the following factors:

- Shared use of a railroad infrastructure with long established traffic patterns for freight and intercity passenger trains (Amtrak);
- The high volume of rail freight and pressure to operate passenger and freight trains in mixed traffic during the weekday commute periods; and
- The absence of an Automatic Train Control system with cab signals along the final segment of VRE territory between Arlington, VA and Union Station.

This segment of track between Arlington and Union Station is the portion of the VRE network where rail traffic is most dense and speeds are the most restricted. Installing the Automatic Train Control/cab signal system will eliminate the "gauntlet" through which VRE trains must pass on their final leg to L'Enfant and Union Stations, the destinations for approximately 60% of VRE passengers and over 4,000 daily riders, and benefit VRE operational efficiency and safety by:

- Transmitting signal status directly to the engineer in the cab, augmenting the fixed wayside signals
- Allowing dispatchers to safely intersperse VRE, Amtrak, and CSXT freight trains at closer intervals and higher speeds

While the project will not expand VRE capacity, it supports the maintenance of on time performance (OTP), the number one concern of 52% of VRE riders in the 2006 Customer Opinion Survey. Maintaining OTP is a key factor in retaining and attracting new riders to the VRE.

Amtrak passenger trains and CSXT freight trains will also utilize the Automatic Train Control system and benefit by improved travel times and safety through this segment of the CSXT RF&P Subdivision.

5) Attachment A – Project Data Information Form – Must be completed by Applicant and submitted with this application.

H. Type of Project:

- 1) ☒ New Construction ___ Rehabilitation ___ Study
- 2) ___ Rail Infrastructure ___ Rail Facility/Station
___ Equipment/Rolling Stock ☒ Signals/Communication Equipment
- 3) Other _____

I. Application Scope of Work Covers:

☒ Entire Project ___ A Phase of a Multi-Phase Project ___ Completion Phase

J. Project Budget Summary:

Preliminary Engineering/Environmental (CE)	100,000
Contract Procurement	50,000
Final Design	200,000
Construction/Signaling	600,000
Construction Management	100,000
Contingency	210,000

Subtotal Project Budget \$ 1,260,000

Total Project Budget \$ 1,260,000

K. Attach detailed budget and schedule information. If the project is for final design, construction or procurement; then plans, specifications and reports to a preliminary engineering level (approximately 30%) should be provided to support the project cost and major features (if applicable). A sample budget and schedule is included in Appendix D.

L. Rail Enhancement Funds Requested in this Application: \$ 882,000

Maximum 70% of Total Project Budget. Do not include any previous allocations or future phases.

M. Local Match Required by Applicant: \$ 378,000

At least a minimum 30% of Total Project Budget

If Overmatch, Provide Percentage

1) Match Breakdown by Source (Including any in-kind match)

a. Provider of Local Match: CSXT

b. Status (confirmed/anticipated) - anticipated

c. Attach justification for value of in-kind match.

2) Other Funding Sources Beyond Match Requirement

a. Provider of Overmatch

b. Status (confirmed/anticipated)

N. Project implementation schedule (based in months). List major milestones of the project, including environmental review and public involvement points if applicable.

Month 1	Execution of project agreement and Notice to Proceed (NTP)
Month 2-8	Preliminary engineering/environmental (CE)
Month 8	NTP for final design/construction
Month 10-13	Final design
Month 14-20	Construction
Month 21	Project completion

O. Statement of how this project promotes or does not preclude dual/multi-access use.

The automatic train control system will support not only VRE use, but also use by Amtrak and freight trains. It will be owned, operated and maintained by the CSXT, the railroad property owner.

P. List additional users of rail line, facility, and/or equipment.

Amtrak, CSXT and other freight railroads

Q. Identify any possible environmental or other issues/concerns within the scope of this project.

The project will be constructed within the existing railroad right-of-way and involve the addition of signals. A categorical exclusion (CE) is anticipated as environmental evaluation documentation.

Required Attachments:

Application is not complete without items 1-5 completed by the Applicant and submitted with the Application.

1. Attachment A - Project Data Information Form (Provided)

2. Attachment B - Application Checklist (Provided)

3. Detailed cost, budget and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D)

4. Certification of Match/% of Match/Documentation of Source of Match Including Defined Match Source (To be provided by Applicant)

5. Certification of Additive Investment (To be provided by Applicant)

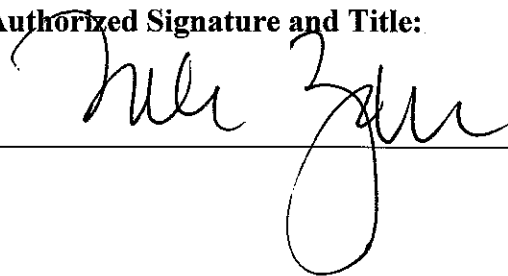
6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.

7. Statement from the owner of the facility that acknowledges the Commonwealth will have a public interest in the facilities, materials, equipment and improvements funded or impacted by this project (To be provided by Applicant/Owner)

Application and Attachment Certification

To the best of my knowledge all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:



Date: 1-31-2008



**Rail Enhancement Fund
Project Application
Completed Application Submission Information**

One signed original, twelve copies, and an electronic copy in PDF format of the completed application and required documentation must be mailed under applicant cover to:

Director
Virginia Department of Rail and Public Transportation
1313 East Main Street, Suite 300
Richmond, VA 23219



**Rail Enhancement Fund
Project Application**

Internal Use

DRPT Tracking #

**Attachment A
Project Data Information Form**

Date: 1-31-2008

Name of Applicant and Project

Applicant:

Virginia Railway Express (VRE)
1500 King Street
Suite 202
Alexandria, VA 22314

Project:

Automatic train control system, Arlington, VA to Washington, DC

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction Period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine the public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

Attachment A
Form A1 – Project Cost and Construction Period

First Construction Year:

Last Construction Year:

Year	Total Project COST	Total DRPT COST
Year 1	560,000	392,000
Year 2	700,000	490,000
Year 3		
Year 4		
Year 5		
Total	\$1,260,000	\$882,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A4 – Passenger Service – Commuter/VRE

Demand Characteristics	CATEGORY	UNITS	VALUE
	Annual VRE Passengers (Existing)	Passengers/Year	3,386,864 (FY2007)
	Steady State Demand – Additional VRE Passengers	Passengers/Year	47,445
	First Year Number of Additional Passengers	Passengers/Year	37,950
	Number of Years Until Steady State	Number of Years	2

Notes:

1. Passengers/year assumes one-way trip
2. Assumes 2.5% increase in passenger boarding on Fredericksburg Line as a result of reduced delays and improved service reliability 2 years after completion of the project.
3. No expansion of VRE service is assumed.

Project Impact on Travel Distance & Time	CATEGORY	UNITS	VALUE
	VRE Passenger Trip Length (Existing)	Miles	54.1 Fredericksburg Line 35.7 Manassas Line
	VRE Passenger Trip Length (After Project Completion)	Miles	54.1 Fredericksburg Line 35.7 Manassas Line
	VRE Travel Time Per Trip (Existing)	Minutes	81.5 system average 90.2 Fredericksburg Line average 74.4 Manassas Line average
	VRE Travel Time Per Trip (After Project Completion)	Minutes	81.5 system average 90.2 Fredericksburg Line average 74.4 Manassas Line average

Notes:

1. No travel time reductions assumed as a result of the project; however, reductions in delays due to other train movements are projected. Prior rail improvements to reduce rail bottlenecks and improve system reliability have resulted in an approximately 20% reduction in the number of VRE delays due to train interference. Similar improvements are anticipated as a result of this project.
2. No expansion of VRE service is assumed.

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A5 – Demand Characteristics for 15-Year Performance Period

Performance Year	Performance Value*
1	37,950
2	47,445
3	47,445
4	47,445
5	47,445
6	47,445
7	47,445
8	47,445
9	47,445
10	47,445
14	47,445
12	47,445
13	47,445
14	47,445
15	47,445
Total	702,180

Notes:

1. Passengers/year assumes one-way trip
2. Values in table indicate increase in existing ridership attributed to the project. No expansion of VRE service is assumed during the performance period.

* For Freight Service Projects – car loads or containers per year
 For Inter-City / Amtrak Passenger Projects – passengers per year
 For Commuter / VRE Passenger Projects – passengers per year



**Rail Enhancement Fund
Project Application Checklist
Attachment B**

Internal Use

DRPT Tracking #

Date: 1-31-08

Name of Applicant and Project:

Applicant:

Virginia Railway Express (VRE)

1500 King Street

Suite 202

Alexandria, VA 22314

Project:

Automatic train control system, Arlington, VA to Washington, DC

Checklist for Application

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ Yes ☐ No

2. Project is an Additive Investment to Virginia.

☒ Yes ☐ No

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ Yes ☐ No

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ Yes ☐ No

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☐ Yes ☒ No Environmental review is included as part of this project.

Internal Use

DRPT Tracking #

6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ Yes ☐ No

PROJECT BUDGET - SCHEDULE OF VALUES

Program: Rail Enhancement Fund
 Agreement: Virginia Railway Express
 Grant: Automatic Train Control System
 Project:

Scopes	Description of Work	Quantity	Unit Rate	Contract Value	Total to Date		Previous Total		Total This Period	
					Quantity/ Percentage	Value	Quantity/ Percentage	Value	Quantity/ Percentage	Value
Preliminary	Preliminary Engineering/Environmental (CE)	1 LS	\$ 100,000	\$ 100,000						
	Subtotal			\$ 100,000						
Design/Contracting										
	Final Design	1 LS	\$ 200,000	\$ 200,000						
	Contract Procurement	1 LS	\$ 50,000	\$ 50,000						
	Construction Management	1 LS	\$ 100,000	\$ 100,000						
	Subtotal			\$ 350,000						
Signaling										
	Signal Labor	1 LS	\$ 300,000	\$ 300,000						
	Signal Material	1 LS	\$ 200,000	\$ 200,000						
	Signal Other	1 LS	\$ 100,000	\$ 100,000						
	Subtotal			\$ 600,000						
	SUBTOTAL DIRECT EXPENSES			\$ 1,050,000						
Contingency										
	Construction Contingency (20%)			\$ 210,000						
	AGREEMENT TOTAL			\$ 1,260,000						
	Maximum DRPT Participation	70%		\$ 882,000						
	Local Match Participation	30%		\$ 378,000						

Schedule for Notice to Proceed

Program:	Rail Enhancement Fund
Agreement:	
Grantee:	Virginia Railway Express
Project:	Automatic Train Control System
Updated Date:	

[illegible]

CERTIFICATION OF MATCH
FOR
THE AUTOMATIC TRAIN CONTROL SYSTEM
ARLINGTON, VA TO WASHINGTON, DC

I, Michael J. Ward, as President & Chief Executive Officer of CSX Transportation, Inc. ("CSXT"), hereby certify that CSXT will provide 30 percent of the total cost of the Automatic Train Control System Project in Virginia. CSXT has the funds ready and available for its 30 percent match of the project.

This certificate is hereby provided to satisfy Item 4 of the Required Attachments section of the Virginia Department of Rail and Public Transportation Rail Enhancement Fund Project Application Form.

Signed: Michael J. Ward
Michael J. Ward
President & CEO
CSX Transportation, Inc.

Date: 1-30-8

Notary: Lorie Rogan



Lorie Rogan

Commission # DD534556


Expires July 29, 2010

Bonded Tray Firm - Insurance, Inc. 800-385-7019

Certification of Additive Investment

To Whom It May Concern:

I hereby certify that the Automatic Train Control System project would provide an additive investment to the Commonwealth of Virginia's rail system. The project will enable safer, more efficient passenger and rail service on the CSX RF&P Subdivision.



Signed by
Chief Executive Officer, Virginia Railway Express

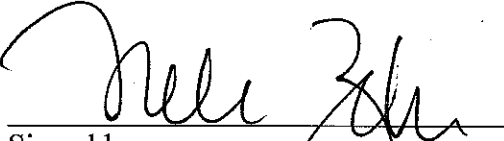
1-31-2008

Date

Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.

To Whom It May Concern:

I hereby certify that with the Automatic Train Control System project, VRE will make every effort to comply with the Small, Women, and Minority (SWAM) enterprises participation goals established for the Rail Enhancement Fund Program.



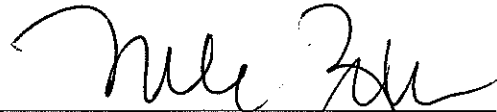
Signed by
Chief Executive Officer, Virginia Railway Express

1-31-2008
Date

Statement from the owner of the facility that acknowledges the Commonwealth will have a Public Interest in Private Facilities impacted by this project

To Whom It May Concern:

At the appropriate time, CSX Corporation will enter into an agreement to be negotiated with the Commonwealth of Virginia to protect the Commonwealth's public interest in the Automatic Train Control System, located along the CSX RF&P Subdivision between Milepost CFP 110 in Arlington, VA and Milepost CFP 112.3 in Washington, DC.


Signed by

CEO
Title

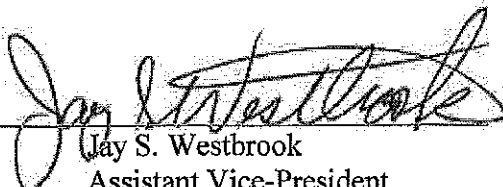
1-31-2008
Date

ACKNOWLEDGEMENT OF PUBLIC INTEREST
FOR
THE AUTOMATIC TRAIN CONTROL SYSTEM
ARLINGTON, VA TO WASHINGTON, DC

I, Jay S. Westbrook, as Assistant Vice-President, Public/Private Partnerships for CSX Transportation, Inc. ("CSXT"), hereby acknowledge that the Commonwealth of Virginia will have a public interest in the AUTOMATIC TRAIN CONTROL SYSTEM ARLINGTON, VA TO WASHINGTON, DC. The Commonwealth of Virginia shall have a continued residual interest in the improvement of the CSXT property provided under the project. CSXT acknowledges and agrees that any improvements provided by this project may be placed on CSXT property. If, for any reason, the public benefit of the project no longer exists, CSXT shall have the option of retaining, or, at the entire cost of the Commonwealth, of removing, or of requiring the removal of, all or any portion of any improvements made under the project and of restoring CSXT's property and facilities to their original condition (ordinary wear and tear excepted), following such removal. If CSXT elects to retain all or any portion of the improvements for continued rail service, then CSXT shall pay to the Department the amount by which the then net salvage value of such improvements exceeds the removal and restoration costs otherwise to be incurred by the Commonwealth.

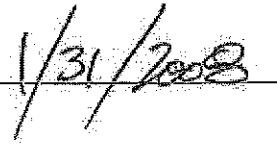
This acknowledgement is hereby provided to satisfy Item 7 of the Required Attachments section of the Virginia Department of Rail and Public Transportation Rail Enhancement Fund Project Application Form.

Signed: _____



Jay S. Westbrook
Assistant Vice-President
Public/Private Partnerships
CSX Transportation, Inc.

Date: _____



Notary: _____

